

REMARKS

A. Summary of Examiner's Action

5 In the subject office action, the Examiner rejected claims 1-42 under either 35 USC 102(e) as being fully anticipated by Sato et al (USP 6,212,517) or under 103(a) as being obvious in view of Sato in combination with one or more other references.

B. Summary of Applicant's response

10 Applicants have amended claims 1-4, 6-7, 9-15, 17-18, 21, 25, 30, and 35-42 as set forth in the attachments to more clearly claim Applicant's invention. For at least the reasons set forth below, Applicant submits amended claims 1-42 are in condition of allowance.

15 C. Sato

Sato teaches a system for providing keywords to facilitate a search in a text retrieval system (see abstract).

Sato's system includes a document database having a number of document texts (col. 3, lines 11-12). The document texts have corresponding text IDs, T1, T2,
20 ...TM (col. 3, lines 21-22).

Sato's system also includes a keyword extracting system including a statistical information processor and a related keyword generator (col. 3, lines 51-53). The statistical information processor is employed to preprocess the document texts to generate a dictionary containing words and their corresponding IDs (col. 3,
25 lines 60-66). The processor also pre-generates for each text, a local statistic table having a number of records, with each record including a word ID and an occurrence count of the word in the text (col. 4, lines 4-10). In like manner, the

processor also pre-generates a global statistic table having a number of records,
with each record including a word ID and an occurrence count of the word in all texts
(col. 4, lines 4-10).

During operation, Sato's system allows a user to enter a query request (col.
5, line 42). The query may specifying the text IDs of desired texts, text attributes, a
Boolean expression using keywords (col. 5, lines 44-46). In response, the system
provides a list of text IDs of found texts (col. 5, lines 51-52). The system prompts
the user to select at least one desired text (col. 5, lines 53-54).

In response to the user's selection, a related keyword generator calculates
10 and displays the "most important" related keywords based on keywords of the
selected texts using the pre-generated global and local statistic tables.

D. Sato's key deficiencies in teachings

1. Keyword presence in a document text is not determined in real time when
15 the document text is retrieved for browsing. Keyword presence in a document text
is pre-determined, to generate the local statistic table of the document text, and
update the global statistic table. Such pre-determination and pre-generation
approach is unworkable for browsing information pages of an ever expanding
reservoir of information pages, such as the world wide web.

20 2. A related keyword list is returned to assist the user in further refining the
search, as opposed to identifier(s) to other document text(s) is(are) assembled to
assist the user in browsing a selected text.

3. Identifiers of document texts are provided in response to user
entered/specified search criteria, not in response to the retrieval and display for
25 browsing of an information page.

4. Sato merely teaches a general dictionary of words and corresponding text
IDs, and global/local statistic tables, wherein each record contains a word and an

occurrence count. Sato does not teach a table of related keywords having corresponding information source identifiers identifying additional information pages that may be retrieved.

5 E. 102(e) Rejections

Claims 1-3, 6-10, 18, 21, 22, 25-27 and 30-32 were rejected under 102(e) as being fully anticipated by Sato.

Claim 1

Claim 1 is directed towards an *augmented information page browsing*
10 *method*. Claim 1 has been amended to clearly require an operation of
automatically assembling and augmenting the first information page being
browsed with one or more information source identifiers identifying one
or more information pages that may be additionally retrieved, based at
least in part on a portion of the content of said first information page
15 (emphasis added)

As those ordinarily skilled in the art would understand, the phrase
“information source identifiers identifying one or more information pages ...” refers
to data processing identifier entities such as the text IDs referred to in Sato.

Thus, Sato’s “related keyword” lists” are clearly not “information source
20 identifiers identifying information pages that may be additionally retrieved”.
Accordingly, even if we ignore the fact the Sato’s “related keyword lists” are provided
in response to a user’s selection of one or more text IDs identifying texts found (as
opposed to a user’s browsing of an information page), for at least the reason that
“related keyword lists” are not “information source identifiers identifying information
25 pages”, Sato’s automatic provision of “related keyword lists” clearly does not
anticipate the required “automatic provision” limitation set forth in claim 1.

As to Sato’s provision of text IDs lists identifying text founds, each of the text
IDs lists is provided in response to a user providing search criteria. For the initial
list, it is provided in response to search criteria entered by the user. For each of the

subsequent list, it is provided in response to search criteria specified by the user via selection of one or more of the provided "related keywords". None of the list is provided in response to the retrieval of an information page to be displayed for browsing. It follows, none of the list provided in response to and based at least in part on the content of an information page being retrieved and displayed for browsing.

Accordingly, claim 1 is patentable over Sato.

Claims 2-3

Claim 3 depends on claim 2, which depends on claim 1. Accordingly, by virtue of their dependencies on claim 1, claims 2-3 are patentable over Sato.

Claim 2 is further patentable over Sato, as it has been amended to clearly require that the portion of the content of the information page being retrieved and displayed for browsing, on which the "information source identifiers" are automatically assembled to augment the information page, is determined via analysis of the information being retrieved and displayed for browsing, where the analysis is performed in real time, on retrieval of the information page to be displayed for browsing. As discussed earlier, under Sato, the document texts are pre-analyzed to have their local statistic tables pre-generated, and the global statistic table updated.

Similarly, claim 3 is also further patentable over Sato, as it has been amended to clearly require the "unique noun" analysis to be performed in real time as the information page is retrieved and displayed for browsing. Again, Sato teaches a completely different approach wherein the document texts are pre-analyzed.

Claims 6-9

Claims 6-9 are dependent on claim 3, which eventually depends on claim 1. Thus, by virtue of their dependencies on claim 1, for at least the same reason,
5 claims 6-9 are patentable over Sato.

Similarly to claims 2-3, claims 6-9 are further patentable over Sato, because they all have been amended to require the corresponding analyzes to be performed in real time as the information page is being retrieved and displayed.

Claim 10

10 Claim 10 is dependent on claim 1. Thus, by virtue of its dependency on claim 1, for at least the same reason, claim 10 is patentable over Sato.

Claim 10 is further patentable over Sato as it requires the patentable method of automatic assembling and augmenting of information page being browsed to be practiced in a client-server configuration, with the client being able to have its
15 browsing experience of an information page retrieved from a third party location enhanced, by performing as little as just identifying for the server the information page being retrieved and displayed for browsing. [However, claim 10 does allow the client to perform varying degrees of additional real time analysis, and provides the results of these varying degrees of additional real time analysis, i.e. unique nouns,
20 first keywords or related keywords.] Regardless, the server enhances the client's browsing of third party information page by providing supplemental information source identifiers identifying supplemental information pages that may be additionally retrieved.

There're no teachings in Sato that evenly remotely resembles this
25 requirement of having a server augments a client's browsing experience of an
information page retrieved from a third party source.

Claims 18, 21, 25 and 30

For at least the earlier discussed Sato deficiencies in teaching any real time analysis of an information page being retrieved and displayed for browsing, and the employment of a server to augment a client's browsing experience of a third party information page, claims 18, 21, 25 and 30 are all individually patentable over Sato.

Claim 22, 26-27, 31-32

Claims 22, 26-27 and 31-32 depend on claims 21, 25 and 30 respectively. Accordingly by virtue of the respective dependencies, for at least the same reasons, claims 22, 26-27 and 31-32 are patentable over Sato.

For at least the earlier discussed Sato deficiencies in teaching any real time analysis of an information page being retrieved and displayed for browsing, and the employment of a server to augment a client's browsing experience of a third party information page, claim 18 is patentable over Sato.

F. 103 Rejections

Claims 4-5, 11-17, 19, 20, 23-24, 28-29 and 33-42 were rejected under 103 as being fully anticipated by Sato in view of Angiulo (6,275,829).

Claims 4-5 and 11-14

Claims 4-5 and 11-14 are dependent on claim 1 incorporating its limitations. Accordingly, by virtue of at least their dependencies on claim 1, for at least the same reason, claims 4-5 and 11-14 are patentable over claim Sato.

Since Angiulo does not remedy the above identified deficiency in teachings of Sato, claims 4-5 and 11-14 remain patentable over Sato even when combined with Angiulo.

Claim 15

Claim 15 includes the limitations of claims 1, 2, and 12. Thus, for at least the reasons set forth above for claims 1, 2 and 12, claim 15 is patentable over claim

5 Sato.

Since Angiulo does not remedy the above identified deficiency in teachings of Sato, claim 15 remains patentable over Sato even when combined with Anguilo.

Claim 16-17, 19-20, 23-24, 28-29 and 33-34

10 Claims 16-17, 18-20, 23-24, 28-29 and 33-34 are dependent on claims 15, 18, 21, 25, and 30 respectively. Accordingly by virtue of the respective dependencies, for at least the same reasons, claims 16-17, 18-20, 23-24, 28-29 and 33-34 are patentable over Sato.

Since Angiulo does not remedy the above identified deficiency in teachings of

15 Sato, claims 16-17, 18-20, 23-24, 28-29 and 33-34 remain patentable over Sato even when combined with Anguilo.

Claims 35 and 39

Claims 35 and 39 contain limitations similar to claims 1 and 18. For at least the same reasons claims 1 and 18 are patentable over Sato, claims 35 and 39 are

20 patentable over Sato.

Since Angiulo does not remedy the above identified deficiency in teachings of Sato, claims 35 and 39 remain patentable over Sato even when combined with Anguilo.

Claims 36-37 and 40-42

25 Claims 36-37 and 40-42 depend on claims 35 and 39 respectively. Accordingly, by virtue of their dependencies, and for at least the same reasons claims 36-37 and 40-42 are patentable over Sato.

Since Angiulo does not remedy the above identified deficiency in teachings of Sato, claims 36-37 and 40-42 remain patentable over Sato even when combined with Angiulo.

5 G. 103 Rejections

Claims 36 and 41 were rejected under 103 as being fully anticipated by Sato in view of Gilmour (6,377,949).

As discussed earlier, claims 36 and 41 are patentable over Sato.

10 Since Gilmour does not remedy the above identified deficiency in teachings of Sato, claims 36 and 41 remain patentable over Sato even when combined with Gilmour.

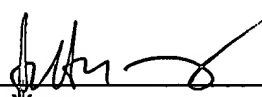
H. Conclusion

15 In view of the foregoing, Applicant respectfully submits that claims 1-42 are in condition for allowance, and early issuance of the Notice of Allowance is respectfully requested.

20 Please charge any shortages and credit any overages to Deposit Account No. 500393.

Respectfully submitted,
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MARKED UP VERSION OF REMAINING PENDING CLAIMS

1 1. (Once Amended) In a client system, an automated method for assisting a
2 user of the client system in retrieving and browsing information, the method
3 comprising:

4 retrieving and displaying on a display of the client system for browsing, a first
5 information page having content, responsive to user direction; and

6 ~~additionally displaying on the display a plurality of dynamically assembled~~
7 automatically assembling and augmenting the first information page being browsed
8 with one or more information source identifiers identifying one or more ~~a plurality of~~
9 ~~information sources~~ pages that may be additionally retrieved for user selection,
10 ~~wherein the information source identifiers are dynamically assembled~~, based at least
11 in part on a portion of the dynamically determined content of said first information
12 page.

1 2. (Once Amended) The method of claim 1, wherein ~~said additionally displaying~~
2 the method further comprises performing on said client system in real time, on
3 retrieval of the first information page, analysis of the first information page to
4 determine the portion of the content of said first information page ~~presence of first~~
5 ~~keywords~~ on which said automatic assembling and augmenting is based.

1 3. (Once Amended) The method of claim 2, wherein said analysis comprises
2 performing on said client system in real time, on retrieval of the first information
3 page, scanning of said first information page for unique nouns presence, accessing
4 a current table of keywords ~~on the client system~~ to determine if any of the unique

5 nouns are to be considered as keywords, and outputting those unique nouns that
6 should be so considered as the presence ones of said first keywords.

1 4. (Once Amended) The method of claim 3, wherein the method further
2 comprises designating to a browser of the client system a first of a plurality of tables
3 of keywords ~~on the client system as the current table of keywords of the client~~
4 system.

1 5. (No change) The method of claim 4, wherein the method further comprises
2 loading/downloading said plurality of tables of keywords onto the client system.

1 6. (Once Amended) The method of claim 32, wherein said ~~additional displaying~~
2 analyzing further comprises performing on said client system in real time, on
3 retrieval of the first information page, retrieval of second keywords related to the
4 presence ones of first keywords from one or more tables of related keywords ~~on~~
5 ~~said client system~~, using said presence ones of first keywords.

1 7. (Once Amended) The method of claim 6, wherein said ~~additional displaying~~
2 ~~further automatic assembling and augmenting~~ comprises performing on said client
3 system in real time, on retrieval of the first information page, retrieval of one or more
4 information source identifiers identifying one or more information sources ~~having~~
5 ~~information pages~~ associated with the second keywords, from one or more
6 information source tables ~~on said client system~~, using said second keywords.

1 8. (No change) The method of claim 7, wherein the method further comprises
2 loading/downloading said one or more tables of information sources onto the client
3 system.

1 9. (Once Amended) The method of claim 32, wherein said ~~additional displaying~~
2 ~~further automatic assembling and augmenting~~ comprises performing on the client
3 system in real time, on retrieval of the information page, assembly of the plurality of
4 one or more information source identifiers ~~dynamically identified~~ based at least in
5 part on the presence ones of first keywords in said first information page.

1 10. (Once Amended) The method of claim 1, wherein ~~said additional displaying~~
2 the method further comprises performing on the client system in real time, on
3 retrieval of the information page, transmission to a server, which is not a source
4 server of the first information page, a selected one of (a) a locator of the first
5 information page identifying a third party location from where the first information
6 page is being retrieved, (b) a plurality of unique nouns of the first information page,
7 (c) a plurality of first keywords present in the first information page, and (d) a
8 plurality of second keywords related to the first keywords.

1 11. (Once Amended) The method of claim 1, wherein said first information page
2 is an information page constituted using a mark-up language, ~~and said information~~
3 ~~sources comprises servers serving information pages so constituted~~.

1 12. (Once Amended) The method of claim 1, wherein the method further
2 comprises ~~additionally displaying on said display~~ a selected one a thumbnail of a
3 second information page corresponding to a first of the additional information
4 pagesources, and a thumbnail of the second information page.

1 13. (Once Amended) The method of claim 12, wherein said ~~additional displaying~~
2 of a thumbnail comprises performing on said client system in real time, on retrieval

3 of the first information page, a selected one of (a) retrieving said thumbnail and (b)
4 retrieving said second information page and dithering said retrieved second
5 information page to form said thumbnail.

1 14. (Once Amended) The method of claim 12, wherein said ~~additional~~ displaying
2 of a thumbnail is made responsive to proximate placement of a cursor next to a first
3 information source identifier corresponding to said ~~second~~first information
4 ~~page~~source.

1 15. (Once Amended) In a client system, an automated method for assisting a
2 user of the client system to retrieve and browse information, the method comprising:
3 retrieving and displaying on a display of the client system for browsing, a first
4 information page having content, responsive to user direction;
5 ~~presenting on a display of the client system, a plurality of dynamically~~
6 ~~constituted information source identifiers identifying a plurality of information~~
7 ~~sources for user selection, based at least in part on presence ones of first keywords~~
8 ~~in a first information page; and~~
9 performing on said client system in real time, on retrieval of the first
10 information page, analysis of the first information page to determine at least a
11 portion of the content of said first information page;
12 automatically assembling and augmenting the first information page being
13 browsed with one or more information source identifiers identifying one or more
14 information pages that may be additionally retrieved, based at least in part on the
15 automatically determined portion of the content of said first information page; and
16 presenting on the display, responsive to a user event, a thumbnail of a
17 second information page corresponding to a first of the identified information
18 page~~sources~~.

1 16. (No change) The method of claim 15, wherein said presenting of the
2 thumbnail comprises performing on the client system in real time, a selected one of
3 (a) retrieving said thumbnail and (b) retrieving said second information page, and
4 dithering said retrieved second information page to form said thumbnail.

1 17. (Once Amended) The method of claim 15, wherein said presenting of the
2 thumbnail is made responsive to proximate placement of a cursor next to a first
3 information source identifier corresponding to the second~~first~~ information
4 page~~source~~.

1 18. (Once Amended) In a server system, an automated method for facilitating
2 provision of assistance to a user of a networked client system to retrieve and browse
3 information, the method comprising:

4 receiving from said client system ~~dynamically determined in real time, on~~
5 retrieval from a third party location by the client system a first information page to be
6 browsed on the client system, related first keywords of presence ones of second
7 keywords in thea first information page being browsed on said client system, where
8 at least presence ones of the second keywords of the first information page are
9 dynamically determined by the client system in real time on retrieval of the first
10 information page; and

11 in response, providing to said client system a plurality of information source
12 identifiers identifying a plurality information ~~sources~~ pages that may be additionally
13 retrieved, based at least in part on said received related first keywords.

1 19. (No change) The method of claim 18, wherein the method further comprises
2 providing to said client system a thumbnail of a second information page
3 corresponding to a first of said information source identifiers.

1 20. (No change) The method of claim 19, wherein the method further comprises
2 retrieving said second information page and dithering said second information page
3 to form said thumbnail.

1 21. (Once Amended) In a server system, an automated method for facilitating
2 provision of assistance to a user of a networked client system to retrieve and browse
3 information, the method comprising:

4 receiving from said client system ~~dynamically determined in real time, on~~
5 retrieval from a third party location by the client system a first information page to be
6 browsed on the client system, presence ones of first keywords in thea first
7 information page being browsed on said client system, where presence ones of the
8 first keywords of the first information page are dynamically determined in real time
9 by the client system on retrieval of the first information page; and

10 in response, providing to said client system a plurality of information source
11 identifiers identifying a plurality information ~~sources~~pages that may be additionally
12 retrieved, based at least in part on said received presence ones of first keywords.

1 22. (No change) The method of claim 21, wherein the method further comprises
2 dynamically determining related second keywords of said presence ones of first
3 keywords; and said providing of information source identifiers to said client system is
4 made based at least in part on said dynamically determined related second
5 keywords.

1 23. (No change) The method of claim 21, wherein the method further comprises
2 providing to said client system a thumbnail of a second information page
3 corresponding to a first of said information source identifiers.

1 24. (No change) The method of claim 23, wherein the method further comprises
2 retrieving said second information page and dithering said second information page
3 to form said thumbnail.

1 25. (Once amended) In a server system, an automated method for facilitating
2 provision of assistance to a user of a networked client system to retrieve and browse
3 information, the method comprising:

4 receiving from said client system ~~dynamically determined in real time, on~~
5 retrieval from a third party location by a client system a first information page to be
6 browsed on the client system, unique nouns of thea first information page-being
7 browsed on said client system, where the unique nouns are dynamically determined
8 in real time by the client system on retrieval of the first information page; and

9 in response, providing to said client system a plurality of information source
10 identifiers identifying a plurality information ~~sources~~pages that may be additionally
11 retrieved, based at least in part on said received unique nouns.

1 26. (No change) The method of claim 25, wherein the method further comprises
2 dynamically determining presence ones of first keywords in said information page
3 using said received unique nouns; and said providing of information source
4 identifiers to said client system is made based at least in part on said dynamically
5 determined presence ones of first keywords.

1 27. (No change) The method of claim 26, wherein the method further comprises
2 dynamically determining related second keywords of said presence ones of first
3 keywords; and said providing of information source identifiers to said client system is
4 further made based at least in part on said dynamically determined related second
5 keywords.

1 28. (No change) The method of claim 25, wherein the method further comprises
2 providing to said client system a thumbnail of a second information page
3 corresponding to a first of said information source identifiers.

1 29. (No change) The method of claim 28, wherein the method further comprises
2 retrieving said second information page and dithering said second information page
3 to form said thumbnail.

1 30. (Once amended) In a server system, an automated method for facilitating
2 provision of assistance to a user of a networked client system to retrieve and browse
3 information, the method comprising:

4 receiving in real time from said client system, on retrieval from a third party
5 location by the client system a first information page to be browsed on the client
6 system, a locator of thea first information page identifying the third party location
7 being browsed on said client system; and

8 in response, providing to said client system a plurality of information source
9 identifiers identifying a plurality information sources pages that may be additionally
10 retrieved, based at least in part on dynamically determined content of the first
11 information page.

1 31. (No change) The method of claim 30, wherein the method further comprises
2 retrieving said first information page and dynamically analyzing the retrieved first
3 information page in real time to determineing presence ones of first keywords in said
4 information page; and said providing of information source identifiers to said client
5 system is made based at least in part on said dynamically determined presence
6 ones of first keywords.

1 32. (No change) The method of claim 31, wherein the method further comprises
2 dynamically determining related second keywords of said presence ones of first
3 keywords; and said providing of information source identifiers to said client system is
4 further made based at least in part on said dynamically determined related second
5 keywords.

1 33. (No change) The method of claim 30, wherein the method further comprises
2 providing to said client system a thumbnail of a second information page
3 corresponding to a first of said information source identifiers.

1 34. (No change) The method of claim 33, wherein the method further comprises
2 retrieving said second information page and dithering said second information page
3 to form said thumbnail.

1 35. (Once amended) A client system comprising:
2 a display; and
3 a browser to facilitate augmented viewing of a first retrieved information page
4 having contents; and, including an analyzer equipped to dynamically assemble
5 a keyword database coupled to the browser, having first and second plurality
6 of keywords, the second keywords being related to said first keywords, to facilitate

7 ~~determination of presence ones of first keywords in said first retrieved information~~
8 ~~page being viewed, and to facilitate determination of related second keywords of~~
9 ~~said presence ones of first keywords, to facilitate augmented provision by said~~
10 ~~browser a plurality of dynamically assembled information source identifiers~~
11 ~~identifying a plurality of information sources~~ pages that may be additionally retrieved,
12 ~~based at least in part on said related second keywords~~ a portion of said content of
13 the first retrieved information page.

1 36. (Once amended) The client system of claim 35, wherein the ~~browser analyzer~~
2 ~~is augmented with~~ further comprises a lexical analyzer to facilitate determination in
3 real time of unique nouns in said first retrieved information page being browsed, ~~for~~
4 ~~use in said determination of presence ones of first keywords in said first retrieved~~
5 ~~information page being browsed.~~

1 37. (Once amended) The client system of claim 35, wherein the client system
2 further comprises an information source database having a plurality of ~~said second~~
3 ~~keywords and a plurality of associated information source identifiers~~ associated with
4 the keywords to facilitate said augmented provision of dynamically assembled
5 ~~information source identifiers by said browser.~~

1 38. (Once amended) The client system of claim 35, wherein the client system
2 further comprises a dithering module to dither a second ~~retrieved~~ information page
3 retrieved to augment the first retrieved information page, to generate a thumbnail of
4 the second retrieved information page.

1 39. (Once amended) A server system comprising:
2 a network interface to couple the server system to a network;

3 an information source database having a first plurality of keywords and a
4 plurality of associated information source identifiers of the first keywords, identifying
5 a plurality of information pages that may be additionally retrieved, to facilitate
6 augmented provision ~~by a browser of a coupled client system of~~ dynamically
7 assembled information source identifiers by a browser of a coupled client system,
8 based at least in part on ~~dynamically determined~~ content of a first retrieved
9 information page ~~being browsed~~ retrieved from a third party location for browsing on
10 said client system.

1 40. (Once Amended) The server system of claim 39, wherein the server system
2 further comprises

3 a keyword database, having a second plurality of keywords and said first
4 plurality of keywords, the first and second keywords being related ~~to said second~~
5 ~~keywords, to facilitate determination of presence ones of first keywords in said first~~
6 ~~retrieved information page being viewed, and to facilitate determination of related~~
7 second keywords of ~~said~~ presence ones of first keywords in the first retrieved
8 information page, ~~for use to perform said facilitation of augmented provision by said~~
9 ~~browser of a plurality of dynamically assembled information source identifiers.~~

1 41. (Once amended) The server system of claim 39, wherein the server system
2 further comprises a lexical analyzer to facilitate determination of unique nouns in
3 said first retrieved information page being browsed, for use in ~~said determination of~~
4 determining presence ones of said first keywords in said first retrieved information
5 page being browsed.

1 42. (Once amended) The server system of claim 39, wherein the server system
2 further comprises a dithering module to dither a second retrieved information page

- 3 retrieved to augment the first retrieved information page to generate a thumbnail of
- 4 the second retrieved information page.